601 Pennsylvania Ave., NW
Suite 800
Washington, DC 20004
202-654-5900

November 13, 2017

VIA ELECTRONIC FILING

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: ***Ex Parte Notification***

GN Docket No. 14-177, *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services;*
ULS File Nos. 0007652635; 0007652637, *AT&T Mobility Spectrum LLC and FiberTower Corporation Seek FCC Consent to the Transfer of Control of 24 GHz and 39 GHz Licenses; and*
WT Docket No. 17-79, *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*.

Dear Ms. Dortch:

On November 9, 2017, Cathleen Massey, John Hunter and David Crawford of T-Mobile, Russell Fox of Mintz Levin, and I met with Commissioner Brendan Carr and his legal advisor Kevin Holmes regarding the draft *Second Report and Order, Second Further Notice of Proposed Rulemaking, Order on Reconsideration, and Memorandum Opinion and Order* in the Spectrum Frontiers proceeding[1/] and the draft *Report and Order* in the Replacement Utility Poles proceeding.[2/]

Spectrum Frontiers

T-Mobile appreciates the Commission's leadership in designating additional millimeter wave band spectrum for licensed wireless mobile broadband. That spectrum, along with spectrum made available in the television incentive auction, and the proceeding focusing on mid-band

---

1/ Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, *Second Report and Order, Second Further Notice of Proposed Rulemaking, Order on Reconsideration, and Memorandum Opinion and Order,* GN Docket No. 14-177, FCC-CIRC1711-02 (circ. Oct. 26, 2017).

2/ Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, *Report and Order,* WT Docket No. 17-79, FCC-CIRC1711-03 (circ. Oct. 26, 2017).

spectrum, will help maintain U.S. leadership in the deployment of fifth generation ("5G") networks.

The Commission should further ensure U.S. leadership in 5G by adopting rules and a timeframe for conducting an auction for the millimeter wave bands in a way that promotes a robust competitive environment. In particular, we urged the Commission to move quickly to auction spectrum that is the subject of this proceeding in 2018. This auction could include the bands made available in the *First Report and Order* – the 28 and 37/39 GHz band – as well as the 24 and 47 GHz bands that are expected to be allocated in the *Second Report and Order*. We noted that much of the 24, 28 and 39 GHz bands are already licensed, or subject to pending transactions, making it necessary to auction as many of these bands as possible for a robust and competitive auction.

In addition, the Commission should uphold its decision to cancel the licenses held by FiberTower Corporation ("FiberTower") for failure to construct and not grant the application submitted by FiberTower and AT&T Mobility Spectrum, LLC ("AT&T"), with respect to those licenses.[3/] The Commission correctly determined that FiberTower failed to meet its construction requirements despite many opportunities, including extensions of time.[4/] Reinstating those licenses would be inconsistent with the Commission's obligation to ensure that spectrum is put to productive use and would undermine its ability to enforce its performance requirements. Rather than reward FiberTower for failing to construct, that spectrum should be available for auction to parties that will put it to use in accordance with the rules adopted in this proceeding.

In addition to urging action to make the millimeter wave bands available, we asserted that the Commission should modify several elements of its draft decisions to better facilitate the introduction of 5G deployments in the millimeter wave bands.

24 GHz Channelization. In the draft *Second Report and Order*, the Commission would channelize the 24 GHz band into blocks of 200 megahertz, with a single 100 megahertz block. We urged the Commission to adopt a band plan with seven 100 megahertz blocks, with auction participants permitted to aggregate multiple blocks. While 200 megahertz blocks should remain the default channel size for millimeter wave spectrum, where an allocation is limited – as it is at 24 GHz – the Commission should depart from that approach. Creating additional opportunities for securing 24 GHz spectrum is particularly important because there is significant incumbent licensing in the band. In many markets, FiberTower already holds 400 of the 700 megahertz of 24 GHz spectrum that will be available. 100 megahertz channels would help ensure robust and competitive bidding.

Additional Spectrum Bands. In addition to moving quickly to auction available bands in 2018, it is important that the Commission move forward on other frequency bands that are under

---

3/ *AT&T Mobility Spectrum LLC and FiberTower Corporation Seek FCC Consent to the Transfer of Control of 24 GHz and 39 GHz Licenses*, Public Notice, DA 17-261 (rel. Mar. 16, 2017); Reply Comments of T-Mobile USA, Inc., ULS File Nos. 0007652635, 0007652637 (filed Apr. 13, 2017).

4/ FiberTower Spectrum Holdings LLC, *Memorandum Opinion and Order*, ULS File Nos. 0005207557, *et seq.*, 0005207187, *et seq.*, 0005207571 *et seq.*, 27 FCC Rcd 13562 (rel. Nov. 7, 2012).

consideration in the proceeding with a goal of conducting a further auction in 2019. In particular, rather than completely deferring consideration of the 32 GHz, 37 GHz, 42 GHz and 50 GHz bands to an unspecified future phase of this proceeding, the Commission should indicate its intent to consider the use of these bands in the near future, with the intent of making them available for wireless mobile broadband use. While we recognize that those bands may present additional challenges, the Commission should indicate that it is continuing to evaluate their use. In particular, we noted that T-Mobile recently submitted a technical paper that supports the use of the 32 GHz, 47 GHz and 50 GHz bands.[5/] That technical paper, which employs conservative, worst-case assumptions, demonstrates that coexistence between 5G operations and radio astronomy services ("RAS") and Earth Exploration Satellite Service ("EESS") is possible in the 32 GHz, 47 GHz, 50 GHz bands. As detailed in the report, with very limited constraints needed to protect EESS receivers, 5G deployments and EESS operations in the band can effectively coexist.[6/] In order to more fully develop the record, the Commission should seek comment on the T-Mobile report so that the Commission can resolve any remaining issues that impede designation of that spectrum for wireless mobile broadband.

Satellite Services. We stated that the rules adopted in the *First Report and Order* struck an appropriate balance between mobile wireless broadband and satellite services and that the Commission should reject further encroachment of the bands by satellite services. The draft *Order on Reconsideration* swings the pendulum too far in the other direction by permitting excessive satellite use in what are intended to be bands primarily available to meet the demonstrated needs for wireless mobile broadband capacity. Particularly considering the actions that the Commission proposes to take in this proceeding to make even more spectrum available for satellite use, the Commission should not further diminish terrestrial use of the bands by allowing additional encroachment based on speculative satellite industry claims. Assertions that the satellite industry needs greater flexibility – with respect to the number of permitted earth stations or the ability to locate them near roads or venues – are false. There is ample fiber capacity to carry that traffic, even in rural areas, and the Commission should not further encumber or harm the ability of mobile broadband licensees to provide services. To the extent entities in the satellite industry nevertheless wish to secure the use of millimeter wave spectrum, they can enter into agreements with terrestrial licensees to accomplish that. And as T-Mobile noted in a study it recently submitted, if satellite companies seek access to millimeter spectrum, they should participate at auction along with other entities.[7/] The Commission should therefore adhere to the decisions it made in the *First Report and Order*.

5/ Letter from Steve Sharkey, Vice President, Government Affairs, Technology and Engineering Policy, T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-177 (filed Oct. 2, 2017); T-MOBILE, UNLEASHING MILLIMETER WAVE SPECTRUM IN THE 32 GHZ, 47 GHZ, AND 50 GHZ BANDS: COEXISTENCE OF MOBILE BROADBAND OPERATIONS WITH THE EARTH EXPLORATION SATELLITE SERVICE AND RADIO ASTRONOMY SERVICE (2017) ("5G Coexistence Study").

6/ *Id.*

7/ *See* Letter from Steve Sharkey, Vice President, Government Affairs, Technology and Engineering Policy, T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-177 (filed Oct. 25, 2017); GREGORY L. ROSSTON & ANDRZEJ SKRZYPACZ, USING AUCTIONS AND FLEXIBLE-USE LICENSES TO MAXIMIZE THE SOCIAL BENEFITS FROM SPECTRUM 1 (2017) ("Based on our research and

Spectrum Aggregation. The draft *Second Report and Order* would impose no pre-auction limits on the aggregation of 24 GHz and 47 GHz spectrum. That is contrary to the Commission's approach at 28 GHz and 37/39 GHz. The Commission proposes to eliminate the pre-auction spectrum aggregation limit for those bands in the draft *Second Further Notice*. The Commission should consider the issue of spectrum aggregation in the millimeter wave bands holistically, not piecemeal as would now be the case. Accordingly, we urged that the Commission consider the question of aggregation limits applicable to 24 GHz and 47 GHz in the *Second Further Notice.*

Replacement Utility Poles

T-Mobile also applauds the Commission's actions to facilitate the deployment of new wireless network infrastructure. 5G networks will require the deployment of many additional antennas, and the Commission's rules and processes should be updated to remove impediments to that build out. T-Mobile is already deploying the 600 MHz spectrum it acquired in the broadcast incentive auction, and reforming the infrastructure siting rules will help T-Mobile deliver services over that spectrum more quickly to more people.

The draft *Report and Order*, which would exclude certain replacement poles from the review requirements of the National Historic Preservation Act ("NHPA"), is an important first step. Dense 5G networks can feature thousands of sites per market, often relying on poles, and conducting Section 106 review each time a pole must be replaced would cause significant cost and delay. In one market, for example, T-Mobile plans to deploy a small cell network featuring more than 800 sites, over one-third of which involve pole replacements. The proposed rules can help T-Mobile as it plans to expand and densify its network in that and other similar markets.

Nevertheless, the draft *Report and Order* can be improved in two ways while still having no potential effect on historic properties. *First*, the draft would require that in order for a replacement pole to be exempt from Section 106 review, the new pole must be placed in the same hole as the existing pole. That criterion is unrealistic. It is unusual for replacement poles to be located in the precise same hole as an existing pole. It is more common to dig a new hole near the original hole, install the new pole, move wires or other equipment from the old pole to the new pole, then remove the old pole. T-Mobile supports the solutions offered by others to allow for a replacement pole to be placed near the existing pole.[8/] Given the close proximity to the existing pole, and because a separate part of the proposed rule prohibits new ground disturbance of previously undisturbed land, this small requested change would not present any risk of potentially affecting historic properties.

Second, the draft *Report and Order* would require that, in order to take advantage of the exemption, a replacement pole must not exceed the height of the original pole by more than 10 percent. The Commission should relax that limitation to facilitate deployment on poles that lack

---

experience, we find that using auctions for flexible-use spectrum licenses that allow providers to choose their service and technology is likely to provide the best long-term benefit for consumers.").

8/ *See, e.g.*, Letter from Scott K. Bergmann, Vice President, Regulatory Affairs, CTIA, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 17-79, at 2-3 (filed Nov. 9, 2017).

space to accommodate communications equipment. Electric utilities often require a separation distance between communications equipment and power lines of between 3 and 6 feet. A 10 percent increase in height of a replacement pole may not be sufficient to allow for a new antenna (which can itself be several feet) *and* the required separation distance. T-Mobile therefore supports the proposals submitted into the record by other parties that the exemption apply when the new pole is no greater than 10 percent *or 10 feet higher* than the existing pole.[9/]

* * *

Pursuant to Section 1.1206(b)(2) of the Commission's rules, an electronic copy of this letter is being filed in the above-referenced dockets and a copy is being provided to each member of the Commission's staff with whom we met. Please direct any questions regarding this filing to me.

Respectfully submitted,

/s/ Steve B. Sharkey
Steve B. Sharkey
Vice President, Government Affairs
Technology and Engineering Policy

cc: (each electronically)
Hon. Brendan Carr
Kevin Holmes

9/ *See, e.g.*, *id.* at 3; Letter from Andre J. Lachance, Associate General Counsel, Federal Regulatory and Legal Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 17-79, at 2 (filed Nov. 6, 2017).